

# GENERAL NOTES:

This plan illustrates the method of attaching thrie beam guardrail to a retrofit bridge endpost.

Horizontal and vertical alignment of the guardrail in the area immediately adjacent to the connection shall be adjusted to a smoothly curved line with no abrupt changes.

The anchor bolts shall conform to requirements of ASTM F-1554, Grade 55, threaded full length, and be galvanized. Threads may be chased after galvanizing. Washers shall conform to requirements of ASTM F-436M and be galvanized. Nuts shall conform to requirements of ASTM A-563M and be galvanized. These materials shall be galvanized in compliance with ASTM A-153M, Class C.


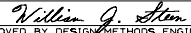
The price bid for "Guardrail, End Anchorages, Beam, RE-69" each, shall be considered full compensation for furnishing all materials listed below and the construction of the end anchorage as detailed herein.

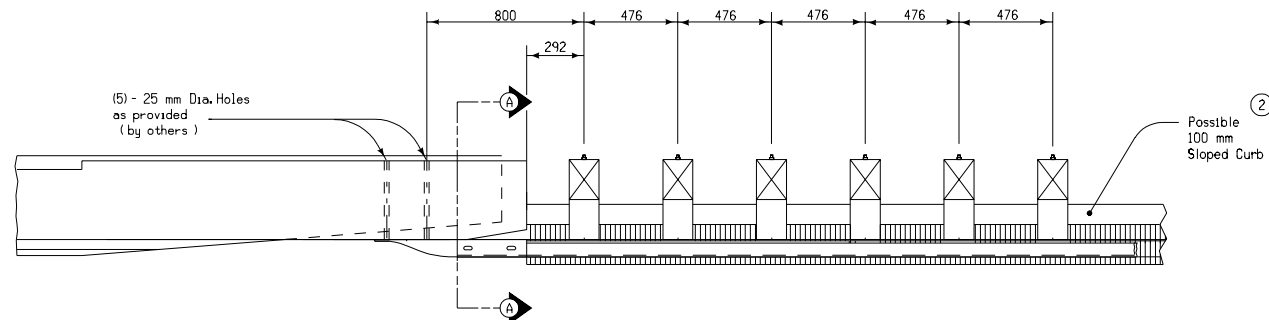
## LIST OF MATERIALS FOR THE RE-69B END ANCHORAGE:

- 1-RE-2B Type 'J' Terminal Connector
- 5-Approved 22 mm H.S. Hex Bolts
- 5-Approved 22 mm H.S. Hex Nuts
- 10-Approved Plain Washers, 24 mm, regular

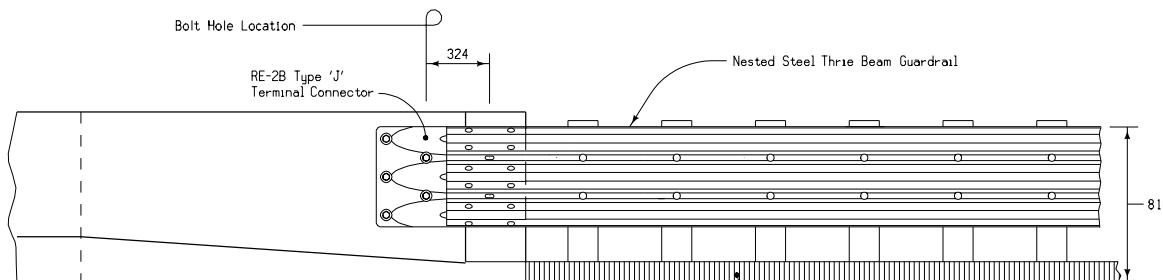
- For attachments on the trailing end of a one-way bridge, the Type 'J' Terminal Connector should be lapped on the outside of the nested thrie beam rails.
- See applicable Bridge Approach Section standards for specific requirements.
- 22 mm anchor bolts shall be of sufficient length to leave a minimum of 2 thread widths outside of the nut.

All dimensions given in millimeters unless noted.

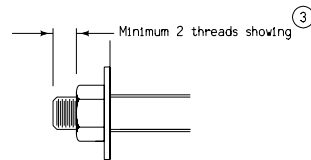
METRIC VERSION	 Iowa Department of Transportation Highway Division		
	<b>STANDARD ROAD PLAN</b>		<b>RE-69B</b>
	REVISION: Changed mounting height to 810.		REVISION NO. 4
	 APPROVED BY DESIGN METHODS ENGINEER		REVISION DATE 10-29-02
	<b>GUARDRAIL INSTALLATION CONNECTION TO RETROFIT BRIDGE ENDPOST</b>		



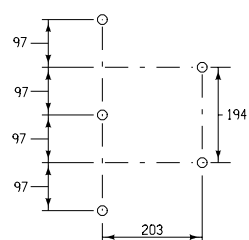
TYPICAL PLAN



TYPICAL ELEVATION

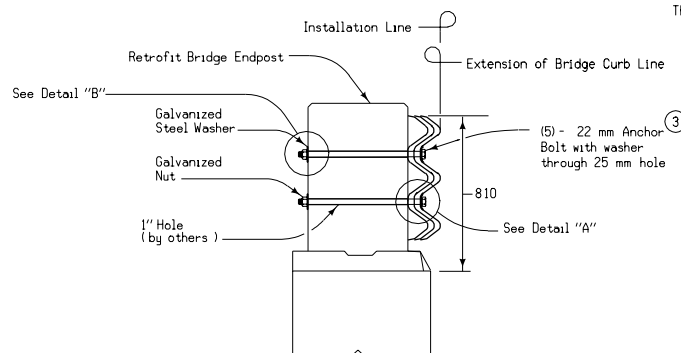


DETAIL "B"

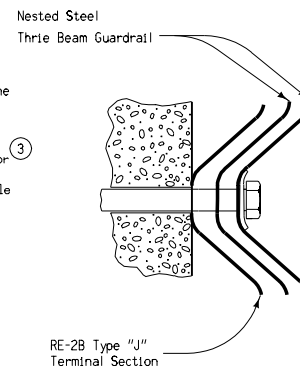


Bolt Pattern

For RE-2B Type "J" Terminal Section



SECTION A-A



DETAIL "A"

For additional information see Standard Road Plan RE-2B.